

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of Docket No: Q73765

Takashi UDAGAWA

Appln. No.: National Stage of PCT/JP03/16816

Confirmation No.: Unknown Group Art Unit: Unknown

Filed: June 28, 2005 Examiner: Unknown

For: BORON PHOSPHIDE-BASED SEMICONDUCTOR LIGHT-EMITTING DEVICE AND PRODUCTION METHOD THEREOF

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. §§ 1.97 and 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

10/540995  
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INFORMATION DISCLOSURE STATEMENT  
U.S. Appln. No.: National Stage of PCT/JP03/16816  
Attorney Docket No. Q73765

filings a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant encloses herewith a copy of a Communication from a foreign patent office in a counterpart application citing such documents (International Search Report for PCT/JP03/16816 dated April 21, 2004), together with an English-language version (if not already included) of at least that portion of the Communication indicating the degree of relevance found by the foreign patent office.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following explanations: Japanese Patent Application Publication Nos. 2-288388 and 10-242567 are cited and discussed on page 1 of the specification. The technical literature reference "Journal of the Japanese Association for Crystal Growth, Vol. 24, No. 2, P150 (1974)" is cited and discussed on page 10 of the specification. Additionally, EP 0395392 corresponds to JP 2-288388.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

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Attorney Docket No. Q73765

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,



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WASHINGTON OFFICE  
23373  
CUSTOMER NUMBER

Date: June 28, 2005

<p>Substitute for Form 1449 A &amp; B/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>				Complete if Known <i>1540995</i>	
				Application Number	National Stage of PCT/JP03/16816
				Confirmation Number	Unknown
				Filing Date	June 28, 2005
				First Named Inventor	Takashi UDAGAWA
				Art Unit	Unknown
				Examiner Name	
Sheet	1	of	1	Attorney Docket Number	Q73765

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code <sup>2</sup> (if known)		
		US 2003/0001162	A1	01/02/2003	TAKASHI UDAGAWA
		US 2002/0000563	A1	01/03/2002	TAKASHI UDAGAWA
		US 6,069,021	A	05/30/2000	KAZUTAKA TERASHIMA, ET AL
		US			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
		EP	0 395 392	A	10/31/1990	TOKYO SHIBAURA ELECTRIC CO.	
		JP	2-288388	A	11/28/1990	TOSHIBA CORP	Abstract
		JP	10-242567	A	09/11/1998	TOSHIBA CORP	Abstract

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation <sup>6</sup>
		PATENT ABSTRACTS OF JAPAN Vol. 1998, No. 01, January 30, 1998 & JP 09-232685 A (TOSHIBA CORP), September 5, 1997	
		Journal of the Japanese Association for Crystal Growth, Vol. 24, No. 2, P150, (1974)	Abstract
		K. SHOHNO, ET AL, "EPITAXIAL GROWTH OF BP COMPOUNDS ON Si SUBSTRATES USING THE B <sub>2</sub> H <sub>6</sub> -PH <sub>3</sub> -H <sub>2</sub> SYSTEM" JOURNAL OF CRYSTAL GROWTH, Vol. 24/25, 1974, pages 193-196	
		Y. KUMASIRO, ET AL, "PREPARATION AND ELECTRICAL PROPERTIES OF BORON AND BORON PHOSPHIDE FILMS OBTAINED BY GAS SOURCE MOLECULAR BEAM DEPOSITION", JOURNAL OF SOLID STATE CHEMISTRY, Vol. 133, 1997, pages 269-272	
		T. IZUMIYA, ET AL, "GROWTH OF BP AND GaN/BP HETEROSTRUCTURES", INST. PHYS. CONF. SER., No. 129 CHAPTER 3, (IOP PUBLISHING LTD..UK), pages 157-162 (1992)	

Examiner Signature		Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), MPEP 901.04 or in the comment box of this document. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to indicate here if English language Translation is attached.